WHAT IS CLAIMED IS:

1. A process for manufacturing a finished lubricant, comprising the steps of:
   a. performing a Fischer-Tropsch synthesis on syngas to provide a product stream;
   b. isolating from said product stream a substantially paraffinic wax feed having less than about 30 ppm total combined nitrogen and sulfur, and less than about 1 weight percent oxygen;
   c. dewaxing said substantially paraffinic wax feed by hydroisomerization dewaxing using a shape selective intermediate pore size molecular sieve comprising a noble metal hydrogenation component, wherein the hydroisomerization temperature is between about 600°F (315°C) and about 750°F (399°C), whereby an isomerized oil is produced;
   d. hydrofinishing said isomerized oil, whereby a lubricating base oil is produced having:
      i. a weight percent of all molecules with at least one aromatic function less than 0.30;
      ii. a weight percent of all molecules with at least one cycloparaffin function greater than 10;
      iii. and a ratio of weight percent of molecules containing monocycloparaffins to weight percent of molecules containing multicycloparaffins greater than 15; and
   e. blending the lubricating base oil with at least one lubricant additive.
2. The process of claim 1, wherein said substantially paraffinic wax feed has a weight ratio of molecules having at least 60 or more carbon atoms and molecules having at least 30 carbon atoms less than 0.18, and a T90 boiling point between 660°F (349°C) and 1200°F (649°C).
3. The process of claim 1, wherein said finished lubricant has less than 1 weight percent ester co-solvent.

4. The process of claim 1, wherein said finished lubricant has less than 8 weight percent viscosity index improver.

5. The process of claim 1, wherein the finished lubricant meets the specifications of one of the SAE J300 June 2001 viscosity grades for multigrade engine oils: 0W-XX, 5W-XX, 10W-XX, and 15W-XX, where XX is 20, 30, 40, 50, or 60.

6. The process of claim 1, wherein the finished lubricant meets the requirements of one or more of the following automatic transmission fluid specifications: DEXRON® II, DEXRON® IIE, DEXRON® III(G), 2003 DEXRON® III, MERCON®, MERCON® V, MOPAR® ATF PLUS, ATF+2, ATF+3, ATF+4, and DEX-CVT®.

7. The process of claim 1, wherein said finished lubricant meets the requirements for one or more of the following heavy duty transmission fluid specifications: Allison C-4, Allison TES-295, Caterpillar TO-4, ZF TE-ML 14B, and Voith G607.

8. The process of claim 1, wherein said finished lubricant meets the requirements for one or more of the following power steering fluid specifications: DaimlerChrysler MS5931, Ford ESW-M2C128-C, GM 9985010, Navistar TMS 6810, and Volkswagen TL-VW-570-26.

9. The process of claim 1, further comprising blending the lubricating base oil with an additional base oil selected from the group consisting of conventional Group I base oils, conventional Group II base oils, conventional Group III base oils, other GTL base oils, isomerized petroleum wax, polyalphaolefins, polyinternalolefins, oligomerized olefins from Fischer-Tropsch derived feed, diesters, polyol esters, phosphate esters, alkylated aromatics, alkylated cycloparaffins, and mixtures thereof.

10. The process of claim 1, wherein said finished lubricant has an HFRR wear volume with 1 Kg load less than 500,000 cubic microns.

11. A process for manufacturing a finished lubricant, comprising the steps of:
    a. performing a Fischer-Tropsch synthesis on syngas to provide a product stream;

b. isolating from said product stream a substantially paraffinic wax feed having less than about 30 ppm total combined nitrogen and sulfur, and less than about 1 weight percent oxygen;

c. dewaxing said substantially paraffinic wax feed by hydroisomerization dewaxing using a shape selective intermediate pore size molecular sieve comprising a noble metal hydrogenation component, wherein the hydroisomerization temperature is between about 600°F (315°C) and about 750°F (399°C), whereby an isomerized oil is produced;

d. hydrofinishing said isomerized oil, whereby a lubricating base oil is produced having:

    i. a weight percent of all molecules with at least one aromatic function less than 0.30;

    ii. a weight percent of all molecules with at least one cycloparaffin function greater than the kinematic viscosity at 100°C multiplied by three;

    iii. a ratio of weight percent molecules containing monocycloparaffins to weight percent of molecules containing multicycloparaffins greater than 15; and

e. blending the lubricating base oil with at least one lubricant additive.

12. The process of claim 1 or claim 11, wherein the lubricating base oil has a ratio of pour point in degrees Celsius to kinematic viscosity at 100°C in cSt greater than the Base Oil Pour Factor as calculated by the following equation: Base Oil Pour Factor = 7.35 x Ln(Kinematic Viscosity at 100°C) - 18.

13. A finished lubricant comprising:

a. a lubricating base oil, having:

    i. a weight percent of all molecules with at least one aromatic function less than 0.30;

    ii. a weight percent of all molecules with at least one cycloparaffin function greater than 10;

iii. a ratio of weight percent of molecules containing monocycloparaffins to weight percent of molecules containing multicycloparaffins greater than 15; and

b. at least one lubricant additive.

14. The finished lubricant of claim 13, wherein the lubricating base oil has a ratio of pour point in degrees Celsius to kinematic viscosity at 100°C in cSt greater than the Base Oil Pour Factor as calculated by the following equation: Base Oil Pour Factor = 7.35 x Ln(Kinematic Viscosity at 100°C) -18.

15. The finished lubricant of claim 13, wherein the amount of the lubricating base oil is between 10 and 99.9 weight percent and the amount of lubricant additive is between 0.1 and 30 weight percent.

16. The finished lubricant of claim 13, having less than 1 weight percent ester co-solvent.

17. The finished lubricant of claim 13, having less than 8 weight percent viscosity index improver.

18. The finished lubricant of claim 13 that is compatible with one or more elastomers selected from the group consisting of neoprene, nitrile, hydrogenated nitrile, polyacrylate, ethylene-acrylic, silicone, chlor-sulfonated polyethylene, ethylene-propylene copolymers, epichlorhydrin, fluorocarbon, perfluoroether, and PTFE.

19. The finished lubricant of claim 13, wherein it meets the specifications of one of the SAE J300 June 2001 viscosity grades for multigrade engine oils: 0W-XX, 5W-XX, 10W-XX, and 15W-XX, where XX is 20, 30, 40, 50, or 60.

20. The finished lubricant of claim 13, wherein it meets the requirements of one or more of the following automatic transmission fluid specifications: DEXRON® II, DEXRON® IIE, DEXRON® III(G), 2003 DEXRON® III, MERCON®, MERCON® V, MOPAR® ATF PLUS, ATF+2, ATF+3, ATF+4, and DEX-CVT®.

21. The finished lubricant of claim 13, wherein it meets the requirements for one or more of the following heavy duty transmission fluid specifications: Allison C-4, Allison TES-295, Caterpillar TO-4, ZF TE-ML 14B, and Voith G607.

22. The finished lubricant of claim 13, wherein it meets the requirements for one or more of the following power steering fluid specifications: DaimlerChrysler MS5931, Ford ESW-M2C128-C, GM 9985010, Navistar TMS 6810, and Volkswagen TL-VW-570-26.

23. The finished lubricant of claim 13, further comprising an additional base oil selected from the group consisting of conventional Group I base oils, conventional Group II base oils, conventional Group III base oils, other GTL base oils, isomerized petroleum wax, polyalphaolefins, polyinternalolefins, oligomerized olefins from Fischer-Tropsch derived feed, diesters, polyol esters, phosphate esters, alkylated aromatics, alkylated cycloparaffins, and mixtures thereof.

24. The finished lubricant of claim 13, having an HFRR wear volume with 1 Kg load less than 500,000 cubic microns.

25. The finished lubricant of claim 13, having a Brookfield viscosity at -40°C of less than 20,000 cP.

26. The finished lubricant of claim 25, having a Brookfield viscosity at -40°C between 5,000 and 13,000 cP.

27. The finished lubricant of claim 13, having a Brookfield viscosity at -40°C of less than 5,000 cP.

28. A finished lubricant comprising:
    a. a lubricating base oil, having:
        i. a weight percent of all molecules with at least one aromatic function less than 0.30;
        ii. a weight percent of all molecules with at least one cycloparaffin function greater than the kinematic viscosity at 100°C multiplied by three;

iii. a ratio of weight percent of molecules containing monocycloparaffins to weight percent of molecules containing multicycloparaffins greater than 15; and

b. at least one lubricant additive.

29. The finished lubricant of claim 28, wherein the lubricating base oil has a ratio of pour point in degrees Celsius to kinematic viscosity at 100°C in cSt greater than the Base Oil Pour Factor as calculated by the following equation: Base Oil Pour Factor = 7.35 x Ln(Kinematic Viscosity at 100°C) – 18.

30. A finished lubricant made by the process comprising the steps of:

a. performing a Fischer-Tropsch synthesis on syngas to provide a product stream;

b. isolating from said product stream a substantially paraffinic wax feed having less than about 30 ppm total combined nitrogen and sulfur, and less than about 1 weight percent oxygen;

c. dewaxing said substantially paraffinic wax feed by hydroisomerization dewaxing using a shape selective intermediate pore size molecular sieve comprising a noble metal hydrogenation component, wherein the hydroisomerization temperature is between about 600°F (315°C) and about 750°F (399°C), whereby an isomerized oil is produced;

d. hydrofinishing said isomerized oil, whereby a lubricating base oil is produced; and

e. blending the lubricating base oil with at least one lubricant additive.

31. The use of a finished lubricant comprising:

a. a lubricating base oil, having:

i. a weight percent of all molecules with at least one aromatic function less than 0.30;

ii. a weight percent of all molecules with at least one cycloparaffin function greater than 10;

iii. a ratio of weight percent of molecules containing monocycloparaffins to weight percent of molecules containing multicycloparaffins greater than 15; and

b. at least one lubricant additive; as an engine oil, an automatic transmission fluid, a heavy duty transmission fluid, a power steering fluid, or an industrial gear oil.

32. The use of a finished lubricant comprising:

a. a lubricating base oil, having:

i. a weight percent of all molecules with at least one aromatic function less than 0.30;

ii. a weight percent of all molecules with at least one cycloparaffin function greater than the kinematic viscosity at 100°C in cSt multiplied by three;

iii. a ratio of weight percent of molecules containing monocycloparaffins to weight percent of molecules containing multicycloparaffins greater than 15; and

b. at least one lubricant additive; as an engine oil, an automatic transmission fluid, a heavy duty transmission fluid, a power steering fluid, or an industrial gear oil.

33. The use of the finished lubricant of claim 31 or 32, wherein the lubricating base oil has a ratio of pour point to kinematic viscosity at 100°C greater than the Base Oil Pour Factor as calculated by the following equation: Base Oil Pour Factor = 7.35 x Ln(Kinematic Viscosity at 100°C) -18.